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Space and Missile Defense Command

SAFETY

RISK

MANAGEMENT

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Risk Management

"A concept that is widely accepted, little understood, and poorly defined."

BG Konitzer

Dir Army

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Risk Management

WHY?

- Command Emphasis
  - AR 385-10, MIL-STD-882, SSDC 385-3
- Reduce/Prevent Mishaps
- Right Thing To Do
- Increased Testing Realism
- Efficient Mission Accomplishment

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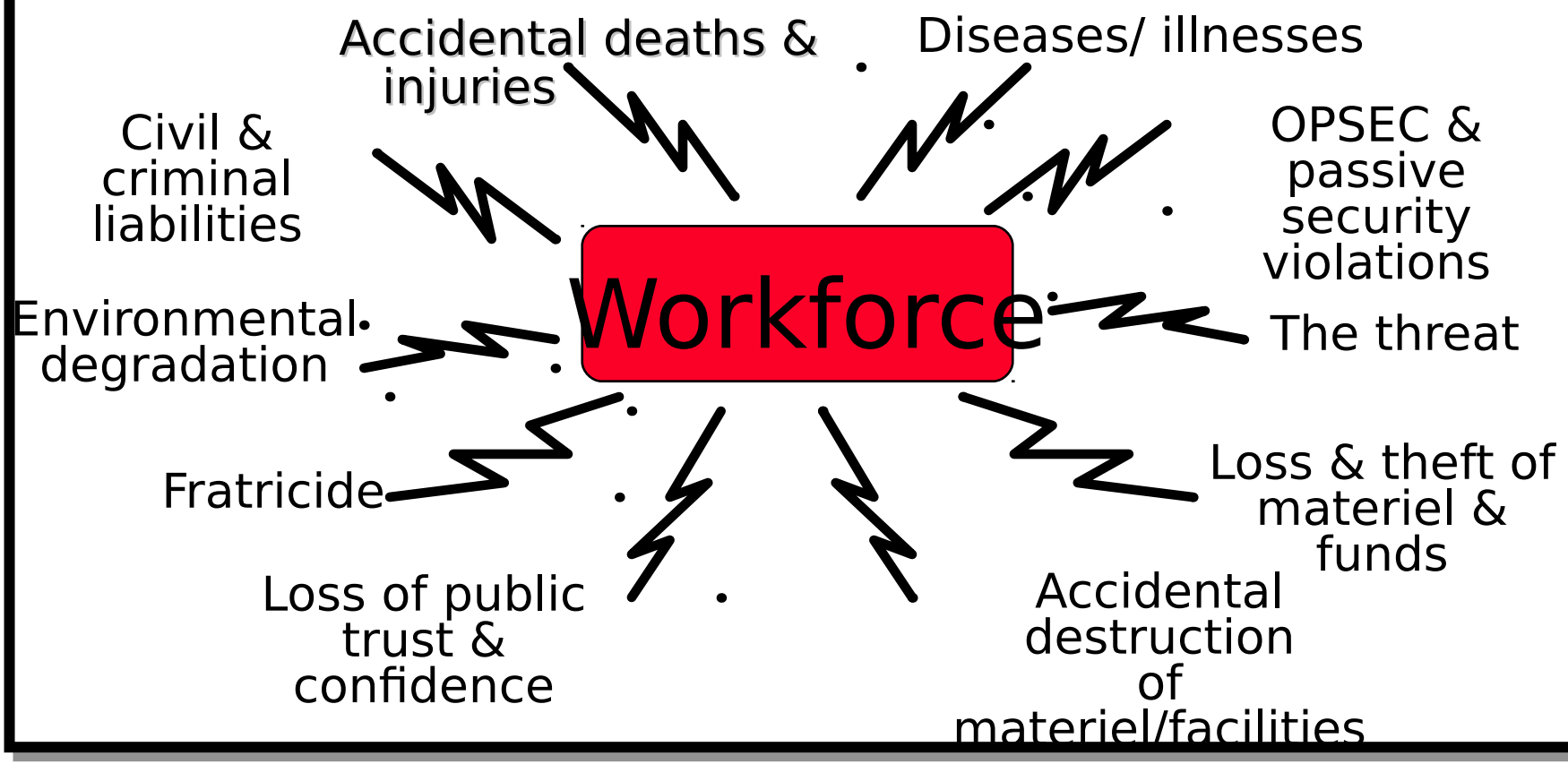
Risks to Workforce and Mission Accomplishment



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Risk Management Definitions

- **Hazard** - any **real** or **potential condition** that can cause injury, illness or death of personnel, or damage to, or loss of equipment or property. (AR 310-25)
- **Risk** - **chance** of hazard or bad consequences; exposure to chance of injury or loss. (Oxford Dictionary, 1976)

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Risk Management Definitions

- **Risk Management** - the **process** of identifying and controlling hazards to protect the workforce and accomplish our mission
  - A **five-step** logical thought process
  - A **proactive,** closed-loop process applicable to any situation and environment.

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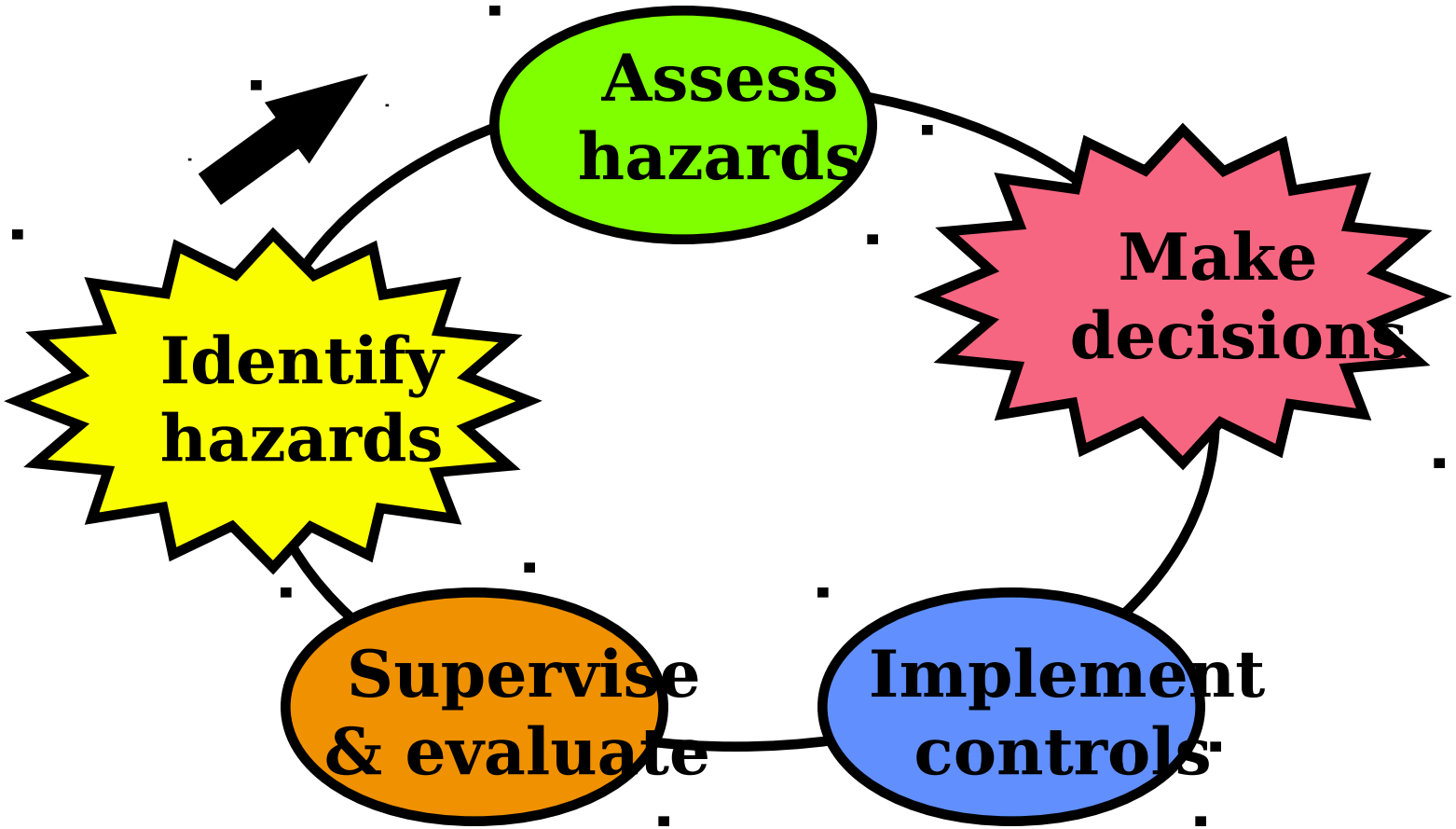
Risk Management Process



Risk Management Process

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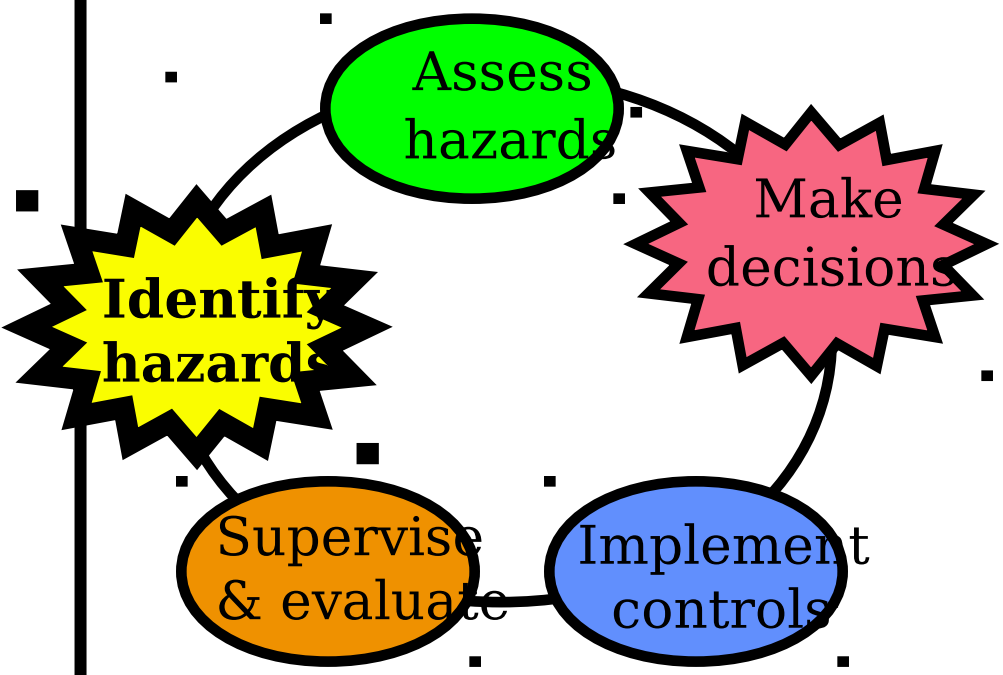
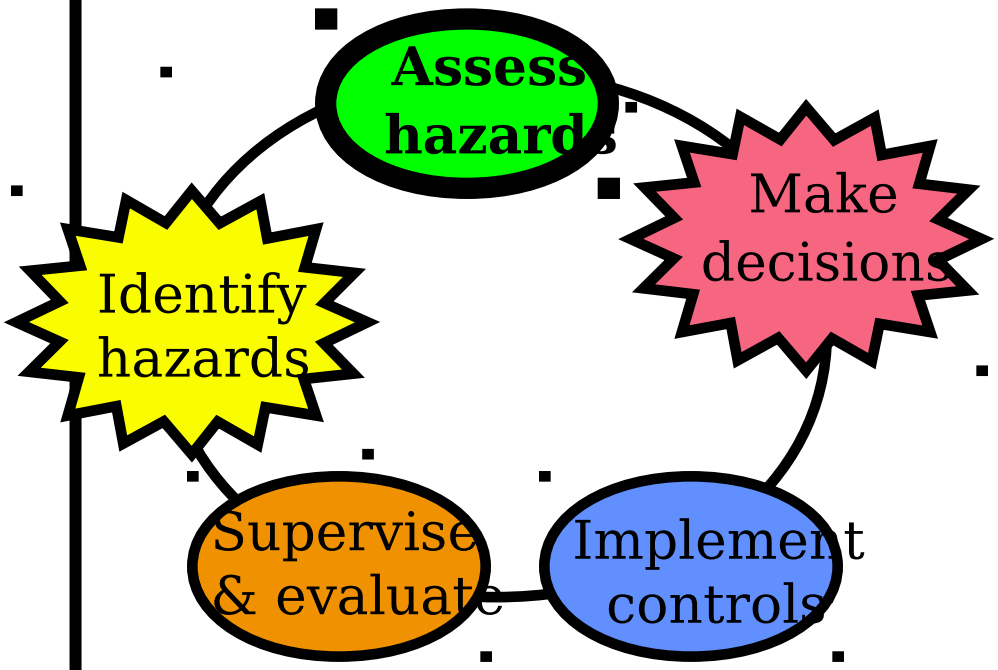


Identify Hazards.

- Identify hazards to the workforce/mission
- Current and future situations
- All operating environments

Risk Management Process.



Assess Hazards.

- Determine risk level
- Potential loss and cost
- Based on probability and severity.

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Risk Management Definitions

- **Risk level** is expressed in terms of hazard probability and severity.
  - **Probability** - the likelihood that an event will occur
  - **Severity** - the expected consequence of an event in terms of degree of injury, property damage, or other mission impairing factors that could occur.

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Risk Management

PROBABILITY				
Frequent	Likely	Occasional	Seldom	Unlikely
A	B	C	D	E

- **Frequent**
  - **Individual item.** Occurs often in the life of the system.
  - **Fleet or inventory.** Continuously experienced.
  - **Individual employee.** Occurs often in career.
  - **All employees exposed.** Continuously experienced.

Risk Management

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PROBABILITY				
Frequent	Likely	Occasional	Seldom	Unlikely
A	B	C	D	E

- **Likely**
  - **Individual item.** Occurs several times in the life of the system.
  - **Fleet or inventory.** Occurs frequently.
  - **Individual employee.** Occurs several times in career.
  - **All employees exposed.** Occurs frequently.

Risk Management

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PROBABILITY				
Frequent	Likely	Occasional	Seldom	Unlikely
A	B	C	D	E

- **Occasional**
  - **Individual item.** Will occur in the life of the system.
  - **Fleet or inventory.** Occurs several times in the life of the system.
  - **Individual employee.** Will occur in career.
  - **All employees exposed.** Occurs sporadically.

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Risk Management

PROBABILITY				
Frequent	Likely	Occasional	Seldom	Unlikely
A	B	C	D	E

- **Seldom**
  - **Individual item.** Unlikely but could occur in the life of the system.
  - **Fleet or inventory.** Unlikely but can be expected to occur in the life of the system.
  - **Individual employee.** Unlikely but could occur in career.
  - **All employees exposed.** Occurs seldom

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Risk Management

PROBABILITY				
Frequent	Likely	Occasional	Seldom	Unlikely
A	B	C	D	E

Unlikely

- **Individual item.** So unlikely you can assume it will not occur in the life of the system.
- **Fleet or inventory.** Unlikely but could occur in the life of the system.
- **Individual employee.** So unlikely you can assume it will not occur in a career.
- **All employees exposed.** Occurs very rarely.

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Risk Management

SEVERITY	
Catastrophic	I
Critical	II
Marginal	III
Negligible	IV

Catastrophic - Death or permanent total disability, system loss, major property damage.

Critical - Permanent partial disability, temporary total disability in excess of 3 months, major system damage, significant property damage.

Marginal - Minor injury, lost workday accident, compensible injury or illness, minor system damage, minor property damage.

Negligible - First aid or minor supportive medical treatment, minor system impairment.

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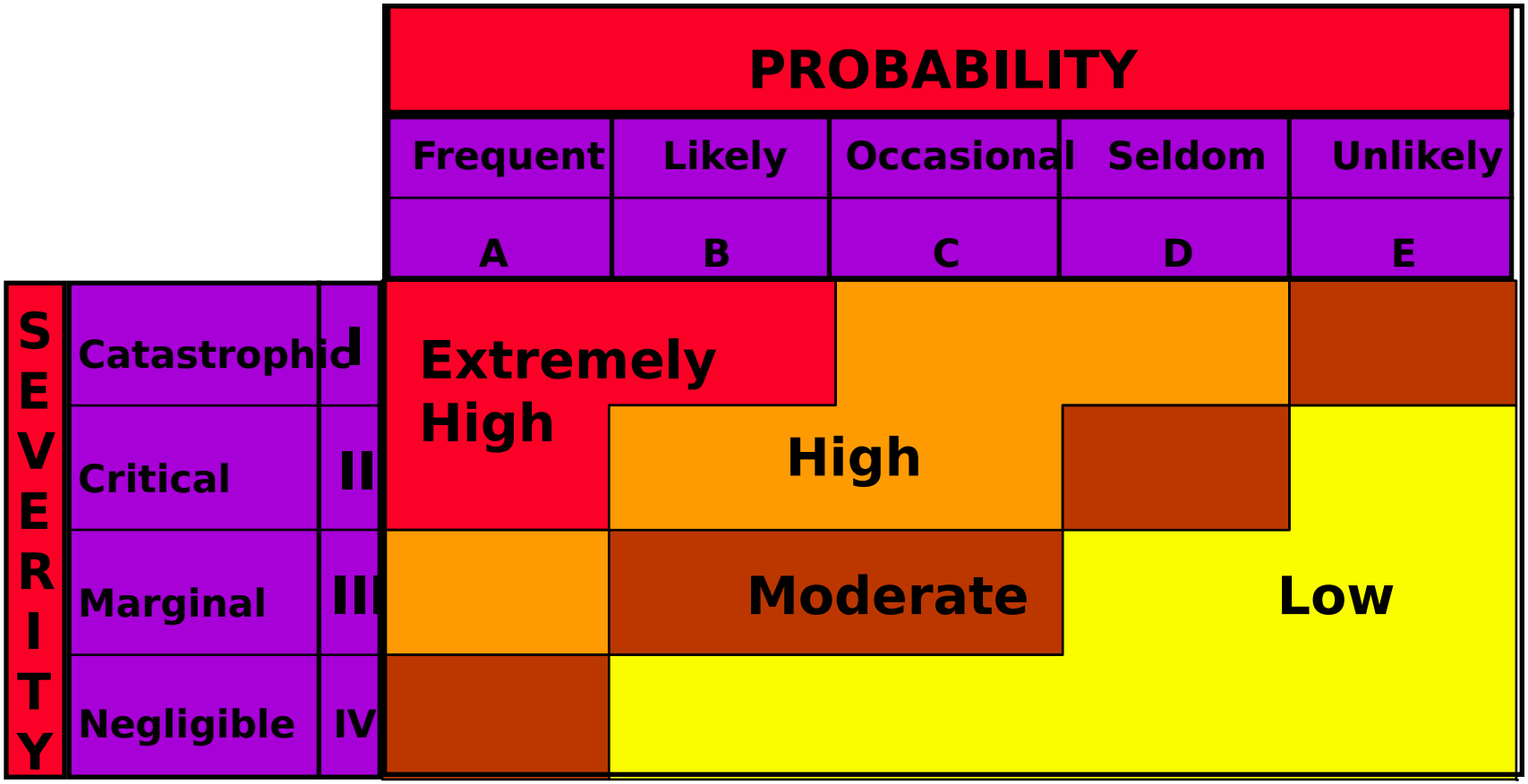
Risk Assessment Matrix



Risk Management Process.

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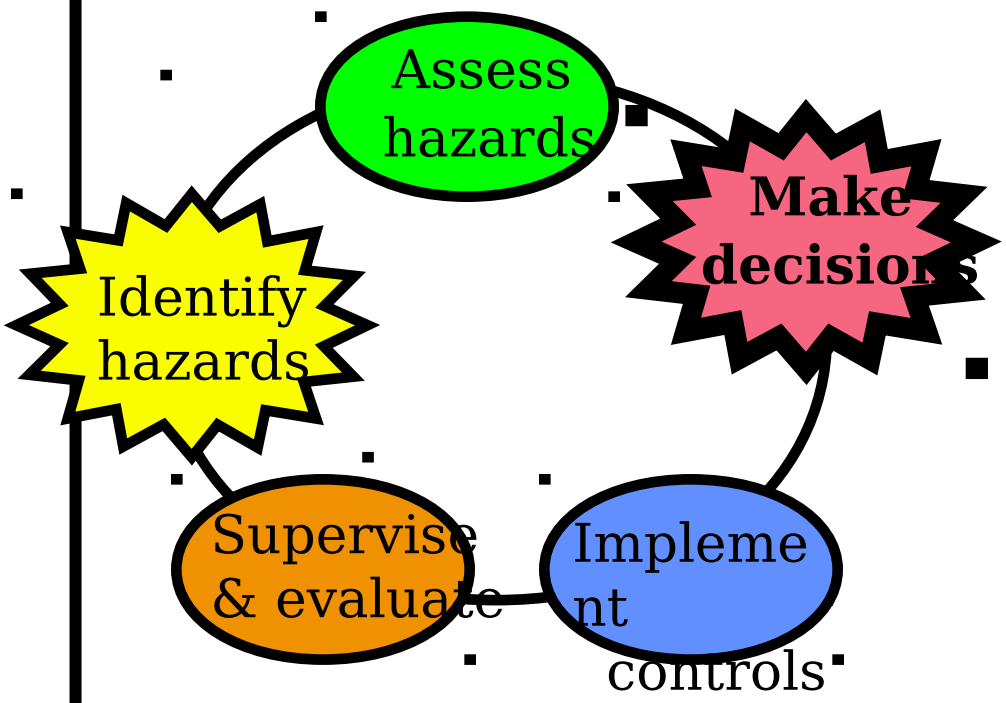

Make Risk Decisions.

- Develop control measures to eliminate hazard or reduce its risk.
- Reevaluate risks
- Accept if benefits outweigh potential cost

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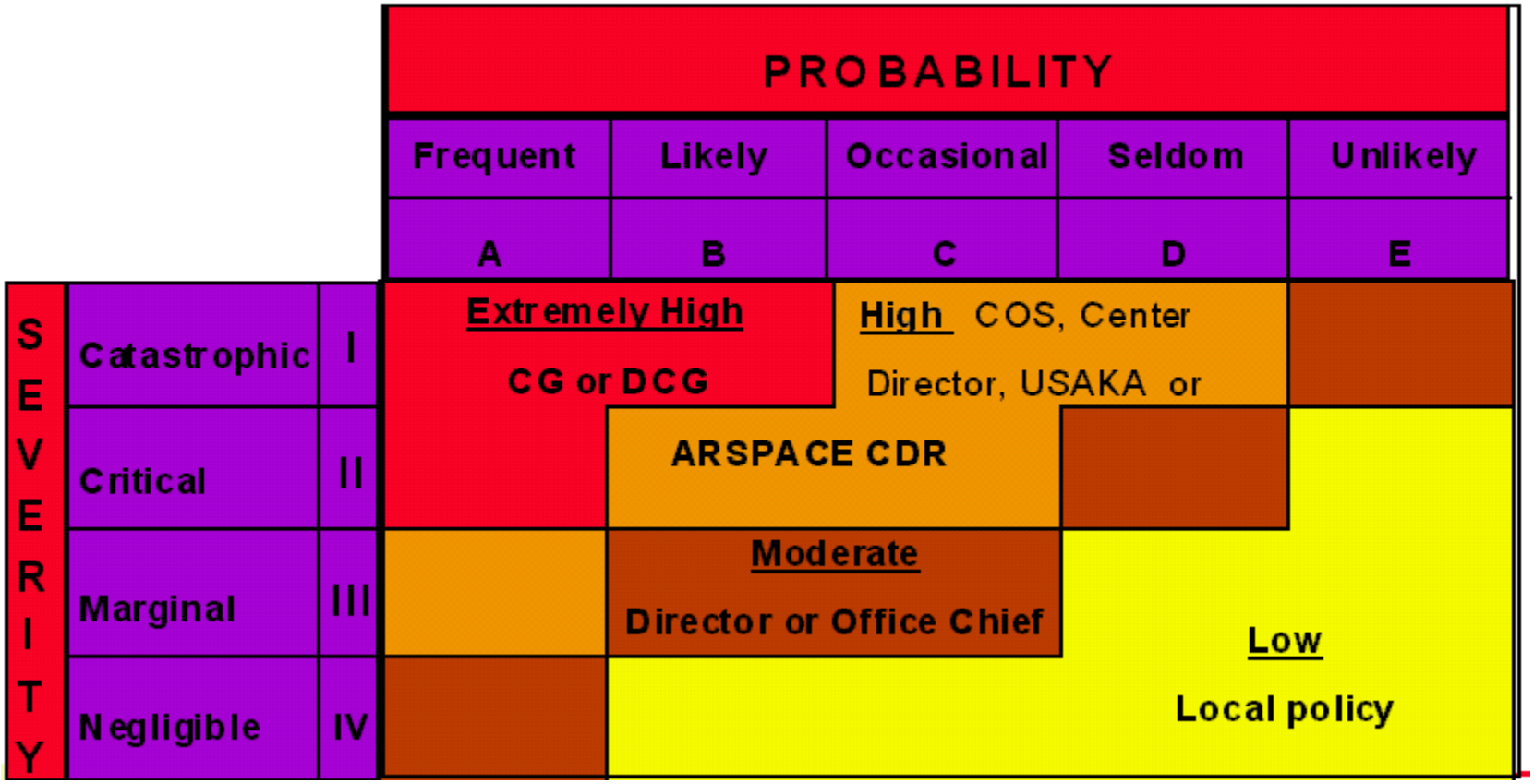
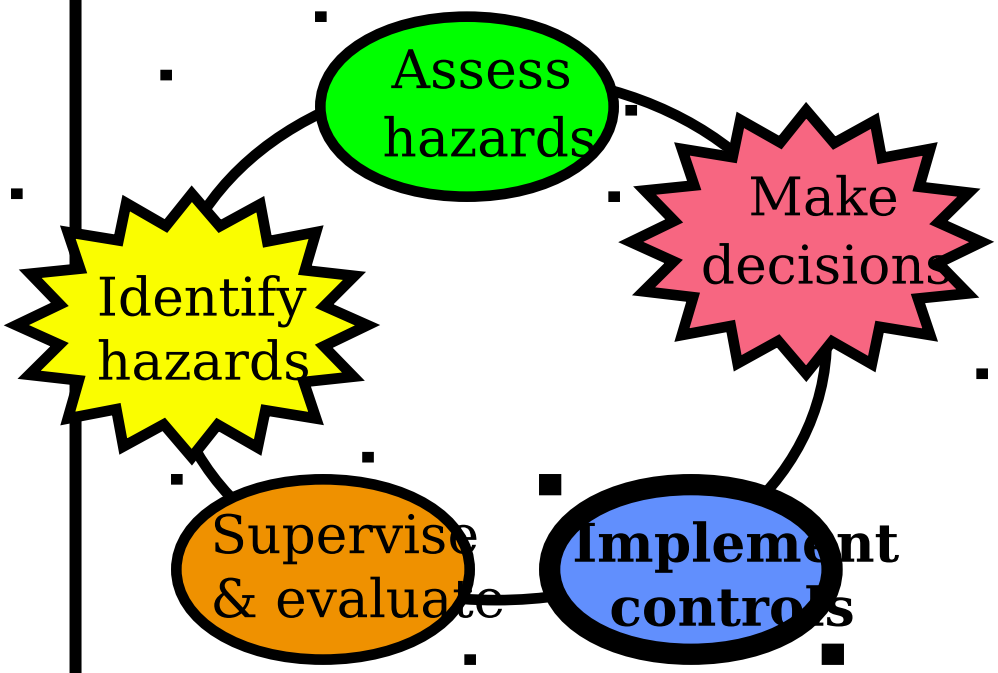
Risk Assessment Matrix

Make an informed decision at the proper level



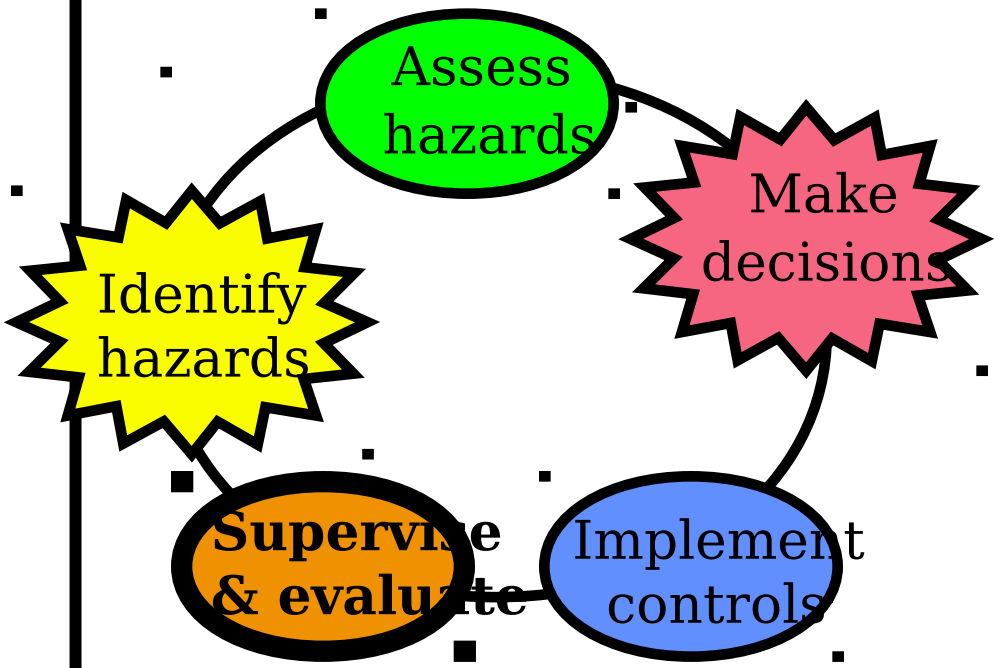
Risk Management Process.



Implement Controls.

- Put controls in place that eliminate the hazards or reduce their risks.
- Examples
  - Redesign
  - Training
  - SOP'S

Risk Management Process.



Supervise & Evaluate.

- Disciplined enforcement
- Evaluate effectiveness
- Adjust/update as necessary.

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Risk Management

Keypoints

- Integrate risk management into planning
- Accept no unnecessary risks
- Make risk decision at the proper level
- Accept risks if the benefit outweighs the cost

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Risk Management
Failure To Manage Risks

- Death and injury to soldiers, civilian employees, and the public
- Damage to Army equipment
- Mission failure
- Ineffective training/testing
- Violation of local, state, and Federal statutes
- Legal liability

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Risk Management

Benefits

- Better Hazard Detection
- Improved Testing Realism
- Reduction In The Number Of Accidents/Injuries
- Minimize Damage To Equipment
- Efficient Mission Accomplishment